

The availability of alcohol to minors in sport canteens

A study about the compliance with the Alcohol Licensing and Catering Act and the evaluation of an intervention in the canteens of amateur sports clubs in The Netherlands

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Abstract

Aims: To evaluate a campaign to increase the compliance with the age limits for selling alcoholic beverages in sport canteens. **Methods:** Two measurements with the use of two different methods. One is a questionnaire amongst bar volunteers in sport canteens based on the juridical instrument The Table of Eleven. The second is the mystery shopping method. **Results:** This study could not verify the intended effect of the campaign. The campaign was recognized by half of the respondents and was appreciated. Bar volunteers reported to know the rules and to comply with the rules, but the mystery shopping measurements showed no behavioural effect. **Conclusions:** An informational campaign is not enough to increase the compliance with the age limits for selling alcoholic beverages in sport canteens in two months. A more severe maintenance policy and a better cooperation with local governments and sports federations is the way to increase the compliance.

Introduction

The aim of this study is to evaluate a campaign to prevent alcohol use by minors in sport canteens in the Netherlands. Compliance with the Dutch Alcohol Licensing and Catering Act is measured by a questionnaire amongst bar volunteers in sport canteens and through practicing the mystery shopping method.

Alcohol use of minors

Alcohol consumption by minors is a worldwide health problem. Several studies from the USA (Foster, McGovern, Wagenaar, Wolfson, Perry & Anstinel, 1995; Foster, Murray, Wolfson & Wagenaar, 1995) and Europe (Anderson, 2008) acknowledge the consequences of an early alcohol debut for both minors and for society.

Research in The Netherlands shows that Dutch minors drink on large scale as well. Despite of the official age limit of 16 years for buying soft alcoholic beverages (containing less than 15% alcohol), 89% of the 15-year-old minors have experience with consuming alcohol (Trimbos-instituut, 2008). In fact, 36% of all children on primary school have drunk alcohol at least once in their lifetime and 38% of all high school students aged under 16 years old drink alcoholic beverages on a weekly basis.

In the past few years, several studies have acknowledged the negative effects and risks of an early drinking debut. Minors who make their alcohol debut under the age of 15 have a 4 times bigger chance to get dependent of alcohol than minors who start drinking above the age of 21. The incidence of alcohol addiction and abuse is the highest amongst minors who start drinking between the age of 11 and 14 (Foster, Vaughan & Foster, 2003). Other research reveals that delaying the age of alcohol debut with 10% leads to a decrease of the expected alcohol consumption at higher age (Hellandsjo Bu, Watten, Foxcroft, Ingebrigtsen, & Relling, 2002).

Despite of the prohibition on alcohol sale to minors, it seems that children under the age of 16 still have access to alcoholic beverages. In the Netherlands, 35% of the minors aged 14 and 15 report to buy alcoholic drinks their selves (Bieleman, Kruize & Nienhuis, 2005). The accessibility to alcohol appears to influence the alcohol consumption

amongst minors on a large scale (Edwards, 1997). Reducing the access and regulating the physical availability could contribute to reducing alcohol consumption under minors (Edwards, 1997. Cnossen, 2007). These rules need to be complied to be effective (Anderson, 2008).

Considering the Dutch law, the alcohol suppliers can be held fully responsible for selling alcohol to minors. The Alcohol Licensing and Catering Act prescribes retailers to verify whether a customer has reached the legal age for buying alcohol by asking for their identification. If the Food and Safety Authority (VWA) notices inaccurate retail behaviour they are authorised to withdraw the retailer's licence which he needs to sell alcohol.

In several studies, minors and alcohol suppliers were asked if alcohol sale to minors actually occurs. Major discrepancies were shown between the percentage of alcohol suppliers reporting to follow the law and the success rate minors report when they actually try to buy alcoholic beverages. A study by Bieleman et al. (2005) shows through self report measures that in at least 85% of the cases, youth is capable to order and to buy alcoholic beverages. However, minors increasingly report to get comments from the alcohol retailers regarding their age.

In 2005, alcohol retailers indicated to respect the rules of the Alcohol Licensing and Catering Act more than they did in earlier years. They reported to perform more ID-checks during the age check and to estimate the age of their customers. A combination of those age-checking methods is performed very often as well (Bieleman et al., 2005).

Alcohol retailers reported their reasons to respect the Alcohol Licensing and Catering Act. For example, they think the age of 16 is too young to start drinking alcohol, they do not want to get in trouble with the Food and safety Authority, and they feel their social responsibility (Bieleman et al, 2005). However, 22% of the respondents (sport canteens and youth clubs) reported to have difficulties with respecting the Alcohol Licensing and Catering Act. Reasons they indicate were the difficulty to estimate someone's age, the possibility of resale of the drinks to younger persons, and their fear of aggression.

In 2005, 99% of the alcohol retailers reported to be aware of the minimum age customers must have to legally sell them soft alcoholic beverages (Bieleman et al, 2005). In sport canteens and youth clubs this was 96% compared to 85% in 2001. The sport canteens and youth clubs estimated that minors form more than 25% of their business.

These percentages obtained by self reporting show a huge discrepancy between the minors and the retailers. Minors report to have easy access to alcoholic drinks, while retailers largely report to respect the Alcohol Licensing and Catering Act. This discrepancy can exist due to the intention of giving social desirable answers. To investigate the real chance of success minors have at buying alcoholic beverages, researchers made use of the mystery shopping method, which has become generally accepted in the USA (Forster et al, 1995). Gosselt, van Hoof, De Jong & Prinsen (2007a) translated the mystery shopping scripts to the situation in The Netherlands. In both countries the enforcement of their alcohol policy and laws was checked using this method.

Former mystery shopping research in The Netherlands demonstrates that in most cases the 15 year old participants could buy alcohol in supermarkets or liquor stores (Gosselt et al, 2007b). In most buying attempts the alcohol suppliers didn't ask for age or didn't check the ID's. It also appeared that even when asked for an ID, in 39% of the cases minors could still buy the alcoholic beverages due to inaccuracy of the counter-assistant.

Alcohol in sport canteens

Like other retailers, sport clubs need to possess an "Alcoholic Beverages and Catering License" to sell alcohol. To get this license, some terms and conditions have to be met. For sport clubs, these terms are (VWS, 2004):

- Having an official regulation on responsible alcohol sale. There has to be described on which moments the sale of alcoholic beverages takes place, when someone is allowed to be a bar volunteer and sell alcohol, and how the compliance of these rules is going to be checked.

- The preset times to retail alcoholic beverages must be visibly suspended.
- Two of the executive bartenders must be in possession of a “social hygiene diplomacy”.

These conditions implicate that bar volunteers in sport canteens are informed about the legal age limits for selling alcoholic beverages and that they aim to serve alcohol in an appropriate way.

There are no established facts about the amount of minors who frequently drink alcohol in sport canteens. However, some qualitative research and observations indicate that sport canteens are a place where lots of minors get involved with alcoholics. They have easy access to alcohol and the drinks are cheaper than in a bar (Anker Solutions, 2008). The Food and Safety Authority has published a factsheet with information of their inspections in sport canteens. They concluded that the compliance of the Alcohol Licensing and Catering Act was very inadequate (VWA, 2007).

Sport clubs are partially dependent from the profit of alcohol sales for their income. 82% of the sport clubs report their canteen profit as (very) important for their budget. 36% of the sale in sport canteens is coming from alcoholic beverages. The canteen profits are especially important for the amateur football, tennis and other field sports like hockey (Tiessen-Raaphors & Breedveld, 2007).

The alcohol industry uses sports for advertising and promotion. In the Netherlands a stadium and a league are named after beer brands and also the big European soccer competitions are sponsored by major beer brands like Heineken and Carlsberg. Exposure to alcohol advertisement increases the alcohol use of youth (Snyder, Milici, Slater, Sun & Strizhakova, 2006). Munro (2000) also acknowledges the big amount of alcohol sponsoring in sports. Alcohol advertisement in the sport bar confirms that sport, fun, and alcohol are a team. Drinking and binge drinking are a tradition in the post-game celebrations in most sports (Munro, 2000).

The implementation of a responsible alcohol policy in sport canteens changes the setting and the amount of consumption, lowers the use of alcohol, and improves the safety of the drinking conditions. When adult sportsmen drink less, a modeling effect for

minors arises. To create support and contribution it is important to cooperate well with all involved stakeholders (Munro, 2000).

Sports clubs in The Netherlands report like other retailers to know the law concerning the alcohol sale to minors (Tiessen-Raaphorst & Breedveld, 2007). However, other research shows by using the mystery shopping method that minors under the legal age of sixteen years old have easy access to soft alcoholic beverages in sport canteens. (Gosselt, van Hoof & de Jong, 2007). This mystery shopping study with 15 year old minors was conducted in one region of The Netherlands. Compliance rates in sport canteens can be considered low (0%).

Campaign Trimbos-institute

The Trimbos-institute (Netherlands institute of Mental Health and Addiction) aims to enhance quality of life by engaging in the development and application of knowledge about mental health, addiction and associated physical illnesses. With a focus on knowledge sharing, the Trimbos-institute aims to undertake evidence-based activities which are both innovative and implementable within professional settings. One of the core tasks comprehends the development and evaluation of new methods, protocols, guidelines and programs for prevention, treatment and organization of care.

Between 2008 and 2010, the Centre of Alcohol & Drugs as a section of the institute runs the campaign: "Drinking can break your heart." The main aim is to contribute to the prevention and limitation of binge drinking amongst youngsters aged between 16 and 24. There is a focus on interventions in the environment of the minors to create awareness of the problems resulting from an early drinking debut and binge drinking.

Because sport canteens are, in many cases, one of the first places where minors get involved with alcohol outside their parental home, the Trimbos-institute decided to create an awareness campaign: "Drinking is no sport, we serve responsible." Very concrete *cues to action* to refuse selling drinks to minors are being given to the bartenders. The main goal is to increase the compliance with the Alcohol Licensing and

Catering Act in sport canteens, in order to decrease the alcohol sale to minors. The message carried out by the campaign contains the following components:

- Drinking alcohol at a young age and binge drinking are harmful for the health and development of minors
- (Binge) drinking and sports don't combine
- Sports clubs have a responsibility in the decrease and prevention of the harm done by binge drinking and have to supply alcoholics in a responsible way.
- An effective alcohol policy in sport canteens can limit the harm done by drinking in sports clubs

Following these points, the Trimbos-institute developed materials which were sent to 8000 sport canteens. The content of the packages consisted of a poster, a flyer, a plasticized information card with instructions for bartenders, stickers to communicate the retail times for alcoholic beverages, and a beer spatula with the slogan of the campaign.

The aim of this study is to evaluate this campaign, and specifically the compliance with the age limits for selling alcohol was measured pre- and post intervention. The next chapter describes the methods used during this research.

Method

The research consisted of two different parts. Part one is a quantitative questionnaire amongst the bartenders in soccer and hockey canteens, which measured their attitude towards complying with the age limits for selling alcoholic beverages and their exposure to the campaign. Part two comprehends a mystery shopping research in sport canteens in one region in The Netherlands. This aims to measure the practical compliance with the age limits for selling soft alcoholic beverages before and after the campaign intervention.

Design

Both methods contained a pre and a post intervention measurement. The questionnaires were sent to two randomly acquired samples out of all 2700 amateur soccer clubs and 310 amateur hockey clubs in The Netherlands. Each sample consisted of 400 soccer clubs and 125 hockey clubs. No questionnaires were spread in the region where the mystery shopping took place. This design was chosen to prevent a test-retest effect and to prevent the influence of both measurements at each other. Filling in a questionnaire about the compliance with age limits could be seen as an intervention, because the respondents are confronted with the subject. This could influence the outcomes of the mystery shopping study or the outcomes of the post intervention measurement.

The mystery shopping study had a within subject design. A number of 52 sport canteens were visited in the region of Utrecht, before and after the campaign intervention. The sport canteens wouldn't notice the mystery shopping, so MS1 couldn't influence MS2. Figure 1 visualizes the design of both methods:

Figure 1: The research design used by both methods

	Pre intervention		Post intervention
525 sport canteens	Q1	Intervention	
525 sport canteens			Q2
400 sport canteens	MS1		MS2

Procedure

For the questionnaires (Q1 and Q2) the e-mail addresses of the random sample of sport clubs were acquired from club websites. An e-mail was sent to those addresses, with the request to send it to the canteen- or bar committee. Because more than one bartender per club could fill in the questionnaire a log-in code was provided to verify the amount of respondents per club. After two weeks, a reminder was sent to the sport clubs who hadn't participated in the survey yet. The pre intervention measurement (Q1) was sent at the 12th of September 2008 and the post intervention measurement (Q2) at the 10th of February 2009.

The pre intervention measurement of the mystery shopping (MS1) took place on Saturday the 1st and Sunday the 2nd of November 2008. The campaign was launched in December and two months later the post intervention measurement (MS2) took place. MS2 took place on Saturday the 14th and Sunday the 15th of February 2009.

Both measurements had the same routine. All mystery shoppers and researchers gathered on Saturday at the departure area. The mystery shopping protocol and other information about the research were provided. There also was a small training. The protocol was as follows:

- two minors enter the sport canteen together
- they order two beers at the bar
- If the bar volunteer asks for the age of the mystery shoppers, they would lie they were 16 years old
- If the retailers asks for their ID, the mystery shoppers show their ID without discussion
- If they get the beers, they pay for their drinks
- They calmly leave the canteen (without consuming the beers)

The reason the mystery shoppers had to lie that they were 16 years old when they were asked for their age, was because that is what minors will do when they try to buy alcohol. The mystery shoppers needed to pay attention to some characteristics

during the buying attempt. The gender and estimated age of the bar tender were recorded, even as an estimation of the number of people in the canteen, the number of bartenders, the kind of alcoholic beverage they ordered and the time and date of the purchase attempt. They also needed to check if there were stickers with the age restrictions and if there was a sign with the dispense times for alcoholic beverages. During MS2, the mystery shoppers also needed to check whether there was campaign material visible in the canteens. If there was anything else remarkable, this was reported too.

Instruments

A detailed description of the instruments used in both methods is given in this paragraph. The questionnaire measures self reported compliance with the age limits for selling alcoholic beverages in sport canteens and the campaign exposure. The mystery shopping method aims to measure the compliance with these rules in practice.

The questionnaire

The questionnaire is mainly based on the The Table of Eleven (Ministry of Justice, 2006). This model was developed during the monitoring of the causes of law enforcement. It can be used for determining to what extend law will be complied by the target group. Using the model can reveal which complications and barriers there might be to comply with the rules. It can determine the compliance with a policy plan or new law but it can be used as well as an instrument to evaluate existing laws and policies.

The Table of Eleven consists of eleven dimensions divided in two subgroups. One is the dimension of spontaneous compliance, the other is the maintenance dimension. The elements of the spontaneous compliance measure in what extend people are aware of the rules, are accepting the aim of the law and the effort it takes them to comply. The maintenance dimension is about all activities governments take to enforce the law, like inspections and sanctions.

This qualitative instrument is not yet standardised and validated for quantitative research. Nevertheless, it was decided to base the quantitative questionnaire on the eleven dimensions, because it can give a complete view on how and why people do or do not comply with a law. This study aims to reveal how bartenders in sport canteens stand towards the age limits for selling alcoholic beverages and why they do or not comply with these rules.

The dimensions are translated into eleven constructs:

- The compliance with the rules and laws by the respondent and the sport club
- Familiarity and clarity of the rules. Do the bartenders get informed by their sport club about the laws and rules?
- Costs and benefits for the respondent and his sport club to engage with the rules
- Personal acceptance of the policy aims
- Personal acceptance of the implementation of the policy
- Acceptance of the implementation of the policy by the sport club
- Personal loyalty with norms in general
- Practical attainability. Does the implementation of the policy bring practical problems?
- Social control and chance of declaration. Does the respondent feel examined in their actions?
- Formal control, chance of inspection and selectivity. How does the respondent estimate the risk to be caught by the formal inspection?
- Sanctions. How does the respondent estimate the opportunity and seriousness of the sanctions by offence?

These constructs were measured with 3 to 8 items per construct on a 5 points Likert Scale (1=totally disagree, 5 = totally agree). Table 1 presents an overview of all constructs, the amount of items and an example of the items.

Table 1, overview of the constructs derived from the Table of Eleven

Construct	# items	Item example
Compliance	5	When I know the parents of a minor customer allow him/her to drink alcohol, I am willing to serve it
Familiarity and clarity of the rules	7	Some rules of the Alcohol Licensing and Catering Law are unclear to me
Costs/benefits	6	It takes too much time to verify the age of each young customer
Acceptance of the policy aim	3	Minors under the age of 16 must be protected by law against drinking alcohol
Acceptance of the policy implementation	6	Refusing to sell alcohol to a 15 year old customer is too severe
Acceptance of the rules by sport club	5	Our club is of the opinion it is important to comply the Alcohol Licensing and Catering Law
Practical attainability	8	As a bar volunteer it is easy to verify the age of customers
Social control and chance of declaration	8	If I serve alcohol to minors, the executives of our club get to know that
Formal control, chance of inspection and selectivity	4	I think there is a big chance that the local government or VWA inspects our sport canteen
Sanctions	4	I think our club gets a serious penalty if the local government or VWA discover an offence
Personal loyalty with norms in general	5	I think it is important to comply the rules of governments in general

Besides these constructs the knowledge of the respondents about the Licensing and Catering Act is measured with nine items answered with either 'true', 'false' or 'don't know'. The questionnaire ends with general and demographic variables.

The post intervention measurement (Q2) also contained evaluation questions based on the principal of Recall & Recognition (Bagozzi & Silk, 1983). At first, the respondents were asked if they could recall the elements of the campaign without any cues. Then the different elements were shown to the respondents and they needed to report if they recognized it.

Respondents description

At Q1, 166 complete questionnaires have been analyzed. At Q2, there were 175. There were small differences in background variables within both groups. A t-test and Wilcoxon test showed no significant differences between both samples. A complete list of all background variables is documented in table 2.1 and 2.2.

Table 2.1 Overview numerical background variables Q1 and Q2

	Q1			Q2			t-value
	N	M	SD	N	M	SD	t (df) ¹
Age	164	47.1	.84	163	48.0	.87	-.72 (325)
Amount of members of the club	165	548.2	24.14	164	581.5	26.78	-.92 (327)

note¹: none of these are significant ($p > .05$)

Table 2.2 Overview nominal background variables Q1 and Q2

		Q1 (N 165)		Q2 (N 164)		Wilcoxon
		#	%	#	%	Z ¹
Gender	Male:	113	68.5%	125	76.2%	-1.57
	Female:	52	31.5%	39	23.8%	
Club type	Soccer:	107	64.8%	113	68.9%	-.70
	Hockey:	52	31.5%	44	26.8%	
	Combined club:	5	3.0%	6	3.7%	
	Other:	1	.6%	1	.6%	
Function	Executive:	110	66.7%	97	59.1%	-1.41
	Bar volunteer:	72	43.6%	85	51.8%	
	Other:	11	6.7%	15	9.1%	
Bar training	yes, last 3 years:	69	41.8%	77	47.0%	-.74
	yes, before:	63	38.2%	55	33.5%	
	no:	33	20.0%	32	19.5%	

note¹: none of these are significant ($P > .05$)

Analyses

The data of all completed questionnaires were automatically entered in SPSS (version 15). This program was used for all analyses. First all incomplete questionnaires were deleted and contrary data were recoded. Then both measurements were compared on demographic variables to check if there were any confounders by running a t-test and a Wilcoxon test. After a reliability check on the construct scores representing the elements

of the Table of Eleven the average scores of both measurements were calculated and compared by running a t-test. A correlation analysis and a regression analysis were conducted to measure the intercorrelations between the constructs and the influence of other construct at the variable 'compliance'. The total exposure to the campaign was measured due to weight the total of free recall and cued recall of the campaign elements. A regression analyses was conducted to see if the campaign exposure had any effect on the construct scores at Q2. The results are described in the next chapter.

Mystery shopping

This method was used to test whether the Alcohol Licensing and Catering Act was enforced in sport canteens before and after the campaign.

Mystery shoppers

The 15 year old mystery shoppers were recruited through school teachers in the region and employees at the Trimbos-institute. At MS1, four boys and two girls participated. They operated in three teams, accompanied by a researcher and cab driver. The team combinations changed on day two of MS1 to minimize the buyer effect, which is the effect that characteristics of the mystery shoppers could affect the buying attempts.

Because some of the mystery shoppers turned 16, four new mystery shoppers were recruited for MS2. Three girls and three boys took part on Saturday and two girls and four boys on Sunday. The teams have been mixed on day two of MS2 as well.

Due to the minor age of the mystery shoppers, their parents needed to give permission for taking part in this research. The participants always took along a document with the announcement that they were taking part in scientific research and an autograph for permission of one of their parents. If there would occur any problems during the buying attempts, they could show this document. Eventually, they never needed to show the document during this research.

Corpus

The visited sport canteens were all situated in the region of Utrecht, The Netherlands. Some in the cities Utrecht and Amersfoort, some in little villages in the region. The time schedules for soccer and hockey games were the base of the routes through the region. Buying attempts would be more realistic if there was any activity in the sport canteens or on the sport fields. The aim was to visit as many canteens in one weekend as possible.

On MS1, the number of 51 buying attempts was conducted in 39 soccer canteens and 12 hockey canteens. On MS2, 11 of the sport canteens visited at MS1 were closed. Six hockey canteens and 33 soccer canteens were revisited at MS2. To get a more representative sample, two extra buying attempts were conducted in a soccer canteen and a combined hockey and soccer club.

Results

Questionnaire

Construct formation

The eleven constructs derived from the Table of Eleven were checked for their reliability. By performing the reliability checks, both measurements were merged. The construct 'personal acceptance of the policy implementation' appeared to be unreliable (α .46). The constructs 'familiarity and clarity of the rules', 'acceptance of the policy aim', 'acceptance of the rules by the sport clubs', 'practical attainability', 'social control/chance of declaration', 'sanctions' and 'personal loyalty with norms in general' were significantly reliable with $\alpha > .70$). The constructs 'compliance', 'costs/benefits' and 'formal control/chance of inspection/selectivity' were approximately significant after one item was deleted (successively α .63, α .66 and α .69). These constructs were considered and treated as reliable. Table 2 gives an overview of the reliability of the constructs and the average construct scores.

Table 2. Reliability and construct scores

Construct	N	# Items	# Items deleted	<i>M</i>'(SD) Q1	<i>M</i>'(SD) Q2	<i>M</i>(SD) total	α
Compliance	341	4	1	4.46(.62)	4.54(.48)	4.50(.56)***	.63
Familiarity and clarity of the rules	341	7	0	3.61(.54)	3.73(.57)	3.67(.56)***	.77
Costs/benefits	341	5	1	4.11(.48)	4.10(.51)	4.11(.49)***	.66
Acceptance of the policy aim	341	3	0	4.03(.71)	4.04(.76)	4.04(.73)***	.82
Acceptance of the rules by sport club	341	5	0	4.09(.52)	4.10(.51)	4.10(.51)***	.79
Practical attainability	341	8	0	3.49(.53)	3.40(.62)	3.44(.58)***	.76
Social control and chance of declaration	341	8	0	3.85(.46)	3.90(.49)	3.88(.48)***	.77

Construct	N	# Items	# Items deleted	M ¹ (SD) Q1	M ¹ (SD) Q2	M(SD) total	α
Formal control, chance of inspection and selectivity	341	3	1	3.26(.66)	3.35(.71)	3.31(.69) ^{***}	.69
Sanctions	341	4	0	3.25(.63)	3.37(.65)	3.31(.65) ^{***}	.75
Personal loyalty with norms in general	341	5	0	3.68(.55)	3.63(.58)	3.66(.57) ^{***}	.75

Note. ¹ Averages measured by using a likertscale with scores arranged from 1 (totally disagree) to 5 (totally agree). Test value= 3, *** = p < 0.001

Descriptive results

The average score at the construct 'compliance' was the only difference between Q1 ($M=4.46$, $SD= .62$) and Q2 ($M= 4.54$, $SD= .48$) which was weakly significant ($p>.01$) . The other constructs showed no significant differences.

The average construct scores are very explicit. They are all positive and differ significantly ($p.001$) from the impartial score '3'. The self reported 'compliance' was most positive ($M=4.50$). Also highly positive were the averages scores on 'costs/benefits'($M=4.11$), 'acceptance of the rules by sport club ($M=4.10$) and personal 'acceptance of the policy aim' ($M = 4.04$). The other constructs had average scores between $M=3.31$ and $M=3.88$.

The knowledge items are mainly answered right, except for one item. 61% of the respondents thought that both the alcohol retailer and the minor are lawfully responsible for the alcohol sale to minors. In fact, this is just the retailer. Minors can't be held responsible for trying to buy alcohol according to the Dutch law.

45.4% of the whole sample reported to have one or more problems with selling alcohol in their sport canteen. The experienced biggest problems of all respondents were encoded into four categories; problems with age limits, problems with current norms about drinking alcohol in sport canteens, problems with serving alcohol to drunk

customers and other problems. An overview is given in the table below. The mentioned problems per category are placed in order of occurrence.

Table 3. Mentioned biggest problem with alcohol sale in the sport canteen

Age limits (21.2% ¹)
<ul style="list-style-type: none">• Older people buying alcoholic beverages for minor children• Estimating the age• Complying the age limits• Teams with players from different age• Age checks while it's (too) busy• Bringing no ID-card• Nagging after a refusal• Minors never stop trying to buy alcoholic beverages• Difficulties with calculating the age• Having permission to sell alcohol during youth matches
Norms about alcohol consumption (12.0% ¹)
<ul style="list-style-type: none">• Community norms in general• Ignorant bar volunteers• Parents agreeing with their children drinking alcohol• Too much alcohol consumption in the canteen in general• Aggression• Pre-drinking and taking own drinks to the canteen• Parents drinking in the presence of their minor children• Youngsters buying alcohol while they still have to play• Behaviour of drunk people
Serving alcohol to drunk customers (6.2% ¹)
<ul style="list-style-type: none">• Refusing to sell alcoholic beverages to drunk customers• Estimating the drunkenness• Not knowing who still need to drive a car
Other problems (6.0% ¹)
<ul style="list-style-type: none">• Taking alcoholic beverages outside• Sticking to set closure times• Rules are too strict and damage adults who want to drink alcoholic beverages• Decreasing of the total sale due to all the rules• Too many difficulties when sticking to the rules• Minimal assistance from the public authorities• No sanctions for the buyers• Too many rules by the government

note ¹: *percentage of whole sample reported these as biggest problem*

Regression

A regression analyses was performed to investigate which other constructs at Q2 influenced the compliance with the Alcohol Licensing and Catering Act. The intercorrelations of the independent variables was checked. Because 'social control and chance of declaration' correlated with 'acceptance of the rules by sport clubs' with .72 ($p < .01$), it was decided to exclude 'acceptance of the rules by sport clubs' in the regression. This construct had the highest correlations with the other constructs.

In the regression, the total explained variance was significant with adjusted $R^2 = .192$, $F(df8) = 11.068$ ($p < 0.01$). All predictors explain more than 19% of 'compliance'. The strongest predictors of 'compliance' were 'costs/benefits' ($p < .01$) followed by 'acceptance of the policy aim' and 'sanctions' ($p < 0.1$). The other constructs had no significant linear relation with 'compliance'.

Table 4. Results of the regression analyses on 'compliance'

Construct	β	t-values
familiarity and clarity of the rules	.10	1.73
Costs/benefits	.26*	4.16
Acceptance of the policy aim	.11**	1.95
Practical attainability	-.02	-.34
Social control and chance of declaration	.03	.41
Formal control, chance of inspection and selectivity	.09	1.54
Sanctions	.10*	1.91
Personal loyalty with norms in general	-.01	-.13

** $P < .01$, * $P < .1$

Campaign evaluation (description and regression)

During Q2, 43.9% of the respondents reported they had seen a campaign about alcohol in sport canteens in the last few months. Most respondents reported they had seen the poster or had seen/heard something about the campaign in the media. An overview of

the different campaign elements and the percentages of respondents which saw these elements, is presented in table 5.

Table 5 , free recall of campaign elements

	N	#Yes	%
Seen or heard of the campaign in general	173	76	43.9%
Poster	76 ¹	47	61.8%
Stickers	76 ¹	21	27.6%
Flyer	76 ¹	31	29.7%
Club magazine	76 ¹	10	13.2%
Club website	76 ¹	4	5.3%
Media	76 ¹	32	42.1%
Other	76 ¹	10	13.2%

note1: total of respondents who reported to have seen or heard of the campaign in general

5.7% of all Q2 respondents could recall the slogan without cues. 4.0% could describe the poster right, 2.9% the flyer and 6.3% the info-card. After the different campaign elements were shown during the questionnaire, 44.7% of the respondents recognized the slogan, 34.7% the poster, 26.3% the flyer and 32.3% the info-card.

The respondents who saw the campaign elements, valued the poster with report mark 7.4, the flyer with report mark 7.3 and the info-card with report mark 7.6. All respondents valued the looks of the campaign with report mark 6.9 and the content with report mark 7.0.

A regression analysis was conducted to see whether the amount of campaign exposure had any influence on the constructs of the Table of Eleven at Q2. The exposure is measured by the total of cued recall and the total of free recall of the campaign. The regression analysis showed a small but significant effect of the campaign exposure to 'practical attainability' of the rules. The total of free recall and cued recall explains 4% of the variance score on 'practical attainability' at Q2 (adjusted R²= .04, F= 4.55 (df2)

P<.05). The campaign exposure had no significant linear relation with the other construct scores at Q2.

Mystery shopping

Descriptive results

During MS1, 52 buying attempts were conducted. The bartenders asked for the age of the mystery shoppers in twelve buying attempts (23.5%). After they told they were 16 years old, the bartender asked in eight cases (15.7%) to show their ID. In one case the mystery shopper couldn't find his ID very fast, and the bartender decided to sell him the two beers. In five cases, the bartender looked at the ID and still decided to sell the beers. In the other two cases (3.7%) the bartender operated rightly and the buying attempts failed.

During MS2, 100% of all buying attempts were successful. There were no interventions during the purchases (asking for age or ID). One of the sport canteens who followed the right procedure during MS1 was revisited and sold the beer, the other one was closed.

No significant influence was found in the characteristics of the bartender, the characteristics of the mystery shoppers, the business in the canteen, time of the buying attempt, the kind of sport club and other background variables.

Five sport canteens visited during MS1 (9.8%) had stickers with the age restrictions for buying alcoholic beverages. Seven canteens (13.7%) had signs with dispense times for alcoholic beverages on it. At MS2 there were stickers noticeable in twelve (28.6%) of the visited canteens. The signs with dispense times were present in eight (19.4%) of the canteens.

Campaign material was visible in seven of the sport canteens visited at MS2. The poster was noticed five times, the stickers two times and in two cases other campaign material was visible.

Table 6, results of the mystery shopping

	MS1		MS2	
Canteens visited	53		53	
Canteens closed	2		11	
Buying attempts	51		42	
Club	Soccer: 39	67.5%	Soccer: 35	83.3%
	Hockey: 12	23.5%	Hockey: 6	14.3%
			Combined club: 1	2.4%
Stickers	5	9.8%	12	28.6%
Signs	7	13.7%	8	19.4%
Asked for age	12	23.5%	0	0%
Asked for ID	8	15.7%	0	0%
Succes of compliance	2	3.9%	0	0%
Campaign material	-	-	7	16.7%

Discussion

This study does not show the intended effect of the campaign. Although half of the respondents at Q2 saw the campaign and gave their appreciation, the compliance with the age limits for selling alcoholic beverages wasn't improved two months after the intervention.

The results show that the factors of the Table of Eleven were all very positive at the pre intervention measurement (Q1). The bar volunteers reported to know the rules, to stick to the rules, to confirm the aim of the Licensing and Catering Act, that there are more benefits than costs when complying the rules, and that it is practical attainable. They estimated the chance to get caught when ignoring the rules as well as the seriousness of sanctions followed by a noticed offence to be moderate to likely. At the post intervention measurement (Q2) these results were the same. Also there was no linear relation found between campaign exposure to the construct scores at Q2. Only a small but significant relation was found between campaign exposure to the 'practical attainability of the rules'. Considering that this relation is very weak, it can be noticed that the given *cues to action* in the campaign on how to refuse alcohol to minors might had a little effect on the attitude of the bar volunteers.

However, the mystery shopping study showed no behavioural effects of the campaign in the visited sport canteens. Some of the campaign material was present in the canteens, but no increased compliance with the age limits was found.

It is remarkable that bar volunteers indicate by self reporting to stick to the rules very strictly while the mystery shopping results indicate that in normal routine no age checking rules are followed when selling alcohol in sport canteens. Also, the bar volunteers do mention a numerous of problems that occur with selling alcoholic beverages. Problems with age checking were mentioned most, followed by problems with current norms about alcohol use in sport canteens.

In previous research, this gap between self reported compliance and reported data from minors (Bieleman et al, 2005) or mystery shopping studies (Gosselt et al., 2007a/b) was also found. No explanation could be given about why the retailers report to

follow the rules but why they don't follow them in daily routine. It is presumed that mystery shopping data are more valid than data gathered by self reporting of retailers, because they might give misleading feedback on compliance with then age limits (Gosselt et al., 2007b) Especially because this study is about following the law, respondents might tend to give desirable answers to prevent themselves from getting in trouble with the local government or Food and Safety Authority.

This research reveals a part of the perception bar volunteers have about the rules, the way they are being complied in their club and problems that occur with the sale of alcohol to minors. The bar volunteers might give desirable answers to questions about their compliance, but they are willing to denote problems occurring in their canteen. In a fact, 45% of the respondents admit the present laws, rules and the way they are maintained are not preventing them from problems with alcohol sale.

Other research shows how it could be explained that no significant effect of the campaign was found. Setting up policy and rules only works if inspectors maintain them and if there is enough basis for the policy by all stakeholders (Anderson, 2008; Crombie, Irvine, Elliot and Wallace, 2007)). Now the sport federations helped to spread the campaign, yet do not much to maintain the rules. The local government and VWA have not enough capacity to increase the inspections. The results also show that the estimated chance and seriousness of the sanctions influence the compliance. Also, the experienced costs and benefits and the acceptance of the policy aim have a linear relation with the self reported compliance.

Shinar & McKnight (1985) found that there cannot be a perceived risk without an objective risk. There needs to be a true risk of apprehension to increase compliance with laws. Law enforcement must be visible; it must appear threatening and be uncertain or unexpected. A public information campaign can increase the compliance if it is applied in a right way. The target group must know the risk of apprehension. Continued publicity about inspections in sport canteens and obtaining news coverage may work (Shinar & McKnight, 1985). That is how increasing the perceived risk of apprehension and a public information campaign can strengthen each other.

Crombie et al. (2007) also underline that educational initiatives such as campaigns can only be effective when combined with other interventions such as enforced legislation. It might be hard to initiate aggressive controls because it is a political unpopular interference with a product that plays an important role in social activities. Especially for local aldermen who probably are familiar with the local sport clubs and their executives and bar volunteers.

It is recommended to synchronize and improve the amount of inspection in sport canteens, the communication about the rules and sanctions, and to inform people about previous inspections and veneered sanctions. The knowledge of the rules is present in the target group, even as the will to comply to the Alcohol Licensing and Catering Act. When there is enough basis and pressure to comply by increasing the amount of inspections by local governments, the federations and the Food and Safety Authority, there is a chance the compliance will increase.

Besides increasing the inspections, the culture of drinking in sport canteens needs to change as well. This because 12% of the respondents at Q2 reported problems with current norms about alcohol consumption in sport canteens. Parents and other adults buy beer for minors, buy beers for a whole team with players from different ages and drink too much alcohol in presence of (their) minor children. Also aggression and other bad behaviour was reported by respondent as a result from too much alcohol consumption in the canteens.

It is hard for bar volunteers to refuse to sell alcohol to minors if parents agree with the alcohol use and if the alcohol is ordered by someone older than 16 and given to minors. To change the culture of drinking in sport canteens, a community based approach is recommended together with increasing the number of inspections by the local governments, sports federations and the Food and Safety Authority. Only if there is enough basis in the environment, willingness to cooperate and more pressure to follow the rules by increased inspections, the compliance with the age limits for selling alcoholic beverages in sport canteens could increase. An informational campaign could strengthen this process.

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